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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/830,477	10/23/2000	Gilbert Moineau	SWA-003 US	8162

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EXAMINER

BATES, KEVIN T

ART UNIT	PAPER NUMBER
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2155

DATE MAILED: 02/04/2004

7

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application

09/830,477

Applicant(s)

MOINEAU ET AL.

Examiner

Kevin Bates

Art Unit

2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

The petition for an extension of time was received on October 23, 2001.

The IDS was received February 27, 2002.

This office action is in response to a communication received on October 23, 2000.

Claims 1-22 are pending

Priority

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Canada on October 30, 1998. It is noted, however, that applicant has not filed a certified copy of the 2,252,207 application as required by 35 U.S.C. 119(b).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim mentions "said network connection", but claim 1, which claim 4 is dependent on has two separate network connections, a Local Area Connection and a remote network, it is in clear in claim 4, whether the limitation is for the local area connection, the remote connection, or either.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-6, 8-9, 11, 13-18, and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Bhatia (6023724).

Regarding claim 1, Bhatia discloses a network modern device connecting a Local Area Network (LAN) to a remote network (Column 4, lines 36 – 39), comprising: a local store containing a list of domain or host names and attribute data (Column 6, lines 1 – 8); a Domain Name Service (DNS) relay module (Column 6, lines 15 – 18); and a router having a LAN interface connected to said LAN (Figure 1, element 340; Column 14, lines 19 – 20), a local connection to said DNS relay module and a network connection, to said remote network (Column 4, lines 45 – 47; Column 6, lines 11 – 14), wherein said DNS relay module uses said list and said attribute data to respond to requests, received from said LAN via said router on said local connection (Column 6, lines 1 – 8), for a numeric address in response to a domain name when said domain name requested is on said list (Column 6, lines 15 – 18), and said DNS relay module generates a DNS request and transmits said DNS request to an external DNS on said remote network via said local connection to said router, and said DNS relay module returning a reply from said external DNS to said LAN via said local connection to said router to respond to said

request for a numeric address when said domain name requested is not on said list (Column 6, lines 15 – 29).

Regarding claim 2, Bhatia discloses that said attribute data is an IP address (Column 6, lines 4 – 5).

Regarding claim 3, Bhatia discloses that said attribute data identifies a domain or host name as a local station on said LAN and said, DNS relay module, when said domain or host name is identified as a local station on said LAN, replies locally to said request (Column 6, lines 1 – 18).

Regarding claim 4, Bhatia discloses that said network connection is a connection to at least one ISDN channel (Column 4, lines 36 – 39).

Regarding claim 5, Bhatia discloses that said router is connected to two ISDN channels: one for the intranet and one for the Internet (Column 5, line 64 – Column 6, line 1).

Regarding claim 6, Bhatia discloses that said DNS relay module listens to NetBIOS Over IP packets of information on said LAN, extracts local computer names and associated IP addresses from said packets and adds said computer names and associated IP addresses to said list of domain names (Column 4, lines 56 – 61).

Regarding claim 8, Bhatia discloses that said device is a digital network modem (Column 4, lines 36 – 39).

Regarding claim 9, Bhatia discloses that said device is an ISDN modem (Column 4, lines 36 – 39).

Regarding claim 13, Bhatia discloses a method for relaying DNS requests on a LAN connected through a router to a remote network by a network modem device (Column 4, lines 36 – 39), comprising: a Domain Name Service (DNS) relay module (Column 6, lines 11 – 14) receiving a domain name request via said router having a LAN interface connected to said LAN (Figure 1, element 340; Column 14, lines 19 – 20), a local connection to said DNS relay module and a network connection to said remote network, on said local connection, for a numeric address in response to a domain name (Column 6, lines 1 – 18); said DNS relay module using a local store containing a list of domain or host names and attribute data to respond to said request when said domain name requested is on said list (Column 6, line 1 – 8), said DNS relay module generating a DNS request and transmitting said DNS request to an external DNS on said remote network via said local connection to said router, and said DNS relay module returning a reply from said external DNS to said LAN via sold local connection to said router to respond to said request for a numeric address when said domain name requested is not on said list (Column 6, lines 15 – 29).

Regarding claim 14, Bhatia discloses that said attribute data identifies a domain name as a domain name for a device on said LAN (Column 6, lines 15 – 18).

Regarding claim 15, Bhatia discloses that said generating comprises requesting a numeric address on said external DNS and responding to said request with a numeric address corresponding to said domain or host name (Column 6, lines 4 – 29).

Regarding claim 16, Bhatia discloses that said attribute data is an IP address (Column 6, lines 4 – 5).

Regarding claim 17, Bhatia discloses steps of listening to NetBIOS Over IP packets of information, extracting local computer names and IP addresses from said packets and adding said computer names and IP addresses to said list of domain names (Column 4, lines 56 – 61).

Regarding claim 18, Bhatia discloses that said list of computer names declared on the LAN is automatically built using packets of information sent by stations on said LAN using NetBIOS Over IP protocol in which said station name and IP address is available (Column 4, lines 56 – 61; Column 6, lines 20 – 23).

Regarding claims 11 and 21, Bhatia that said external DNS is one of a group of external DNS (Column 6, lines 5 – 6).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7, 10, 12, 19-20, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bhatia (6023724) in view of Rowe (“Reliability of WWW name servers”) (Applicants IDS).

Regarding claims 7 and 19, Bhatia does not explicitly indicate that said list is a list of domain names looked-up on the external DNS, and said DNS relay module automatically adds to said list of domain names looked-up on the external DNS, an entry corresponding to said reply from said external DNS. Rowe teaches a local DNS system

that has a shared database (Page 774, Column 2, lines 13 – 15, “The main components...”). In Rowe’s teachings the DNS updates and adds to the list of the local DNS based in response to the foreign Name Servers replies (Page 776, Column 1, lines 2 – 9, “The Resolver tries...”). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Rowe’s idea of updating the local DNS based on the replies of the remote DNS on Bhatia’s modem and local DNS system in order to reduce the number of accesses to the remote DNS by having a distributed and reliable DNS (Page 773, Column 1, lines 2 – 9).

Regarding claims 10 and 20, Bhatia in combination with Rowe discloses that said list comprises: a list of domain names looked-up on an external DNS with corresponding attribute data (Rowe, Page 776, Column 1, lines 1 – 15); and a list of host names declared on said LAN with corresponding attribute data (Bhatia, Column 6, lines 1 – 8).

Regarding claims 12 and 22, Bhatia in combination with Rowe discloses that said list of domain names and attribute data has an expiry date and time, and said DNS relay module comprises a mechanism for requesting from an external DNS a newly fetched numeric address for said domain name when a next request for said domain name will be received, for restoring said newly fetched numeric address as the attribute data for said domain name in said list and for refreshing said expiry date and time (Rowe, Page 776, Column 1, lines 1 – 15).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U. S. Patent No. 6012088 issued to Li.

U. S. Patent No. 5790548 issued to Sistanizadeh.

U. S. Patent No. 6680935 issued to Kung.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Bates whose telephone number is (703) 605-0633. The examiner can normally be reached on 8 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on (703) 308-6662. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KB
January 31, 2004


HOSAIN ALAM
SENIOR PATENT EXAMINER